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ADDRESS

ON THE

EFFECTS OF INTEMPERANCE

ON THE

INTELLECTUAL, MORAL, AND PHYSICAL POWERS.

ORIGINALLY DELIVERED

BEFORE THE

WASHINGTON CITY TEMPERANCE SOCIETY.

BY THOMAS SEWALL, M. D.

Professor of Anatomy and Physiology in the Columbian College.

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SOCIETY, ITS BRANCHES AND AUXILIARIES, IN
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SPONTANEOUS COMBUSTION OF DRUNKARDS.

The spontaneous combustion of drunkards is a fact well established in Medical science. The following are among numerous instances which have been related by eminent physicians and others.

Dr. Peter Schofield, in a late address delivered at the formation of a Temperance Society in the township of Bastard, in the district of Johnstown, in the province of Upper Canada, states a case of spontaneous combustion which occurred in his practice. "It is well authenticated," says the Doctor, "that many habitual drinkers of ardent spirits are brought to their end by what is called 'spontaneous combustion.'" By spontaneous combustion I mean when a person takes fire by an electric shock, and burns up without any external application. Trotter mentions several such instances. One happened under my own observation. It was the case of a young man about twenty-five years old: he had been an habitual drinker for many years. I saw him about 9 o'clock in the evening on which it happened. He was then, as usual, not drunk, but full of liquor. About 11 the same evening I was called to see him. I found him literally roasted from the crown of his head to the soles of his feet. He was found in a blacksmith's shop, just across the way from where he had been. The owner, all of a sudden, discovered an extensive light in his shop, as though the whole building was in one general flame. He ran with the greatest precipitancy, and on flinging open the door, discovered a man standing erect in the midst of a widely extended silver-colored blaze, bearing, as he described it, exactly the appearance of the wick of a burning candle in the midst of its own flame. He seized him by the shoulder and jerked him to the door, upon which the flame was instantly extinguished.

"There was no fire in the shop, neither was there any possibility of fire having been communicated to him from

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Professor of Anatomy and Physiology in the Columbian College.

WE are convened, my fellow-citizens, to attend the first anniversary of a Society for the promotion of Temperance; an institution which, in accordance with the spirit of the times, has been established through our land by the almost united voice of the nation, and this for the suppression of one of the most alarming evils that ever infested human society; a vice, too, so odious in its nature, so injurious in its consequences, and attended with so many circumstances of suffering, mortification, and disgrace, that it seems difficult to understand how it should ever have become a prevalent evil among mankind; and more especially how it should have come down to us from the early periods of society, gaining strength, and power, and influence, in its descent. That such is the fact, requires no proof. Its devastating effects are but too obvious. In these latter times more especially, it has swept over our land with the rapidity and power of a tempest, bearing down every thing in its course. Not content with rioting in the haunts of ignorance and vice, it has passed through our consecrated groves, has entered our most sacred enclosures: and oh! how many men of genius and of letters have fallen before it! how many lofty intellects have been shattered and laid in ruins by its power! how many a warm and philanthropic heart

has been chilled by its icy touch ! It has left no retreat unvisited ; it has alike invaded our public and private assemblies, our political and social circles, our courts of justice and halls of legislation. It has stalked within the very walls of our Capitol, and there left the stain of its polluting touch on our national glory. It has leaped over the pale of the Church, and even reached up its sacrilegious arm to the pulpit and dragged down some of its richest ornaments. It has revelled equally on the spoils of the palace and the cottage, and has seized its victims, with an unsparing grasp, from every class of society ; the private citizen and public functionary, the high and the low, the rich and the poor, the enlightened and the ignorant : and where is there a family among us so happy as not to have wept over some of its members, who have fallen by the hand of this ruthless destroyer ?

As a nation, intemperance has corrupted our morals, impaired our intellect, and enfeebled our physical strength. Indeed, in whatever light we view it, whether as an individual, a social, or national evil, as affecting our personal independence and happiness, our national wealth and industry ; as reducing our power of naval and military defence, as enfeebling the intellectual energies of the nation, and undermining the health of our fellow-citizens ; as sinking the patriotism and valor of the nation, as increasing paupers, poverty and taxation, as sapping the foundation of our moral and religious institutions, or as introducing disorder, distress and ruin into families and society ; it calls to us, in a voice of thunder, to awake from our slumbers, to seize every weapon, and wield every power which God and nature have placed within our reach, to protect ourselves and our fellow-citizens from its ravages.

But the occasion will not permit me to dwell on the general effects of intemperance, nor to trace the history of its causes. I shall, therefore, confine myself more particularly to a consideration of its influence on the individual : its effects on the moral, intellectual and physical constitution of man—not the primary effect of ardent spirit as displayed in a fit of intoxication ; it is the more insidious, permanent and fatal effects of intemperance, as exemplified in the case of the habitual dram-drinker, to which I wish to call your attention.

I. The effects of ardent spirit on the *moral powers*. It is perhaps difficult to determine in what way intemperance first manifests its influence on the moral powers, so variously does it affect different individuals. Were I to speak from my own observation, I should say that it first appears in an alienation of those kind and tender sympathies which bind a man to his family and friends; those lively sensibilities which enable him to participate in the joys and sorrows of those around him. "The social affections lose their fulness and tenderness, the conscience its power, the heart its sensibility, till all that was once lovely, and rendered him the joy and the idol of his friends, retires," and leaves him to the dominion of the appetites and passions of the brute. "Religious enjoyment, if he ever possessed any, declines as the emotions excited by ardent spirit arise." He loses, by degrees, his regard to truth and to the fulfilment of his engagements—he forgets the Sabbath and the house of worship, and lounges upon his bed, or lingers at the tavern. He lays aside his Bible—his family devotion is not heard, and his closet no longer listens to the silent whispers of prayer. He at length becomes irritable, peevish, and profane; and is finally lost to every thing that respects decorum in appearance, or virtue in principle; and it is lamentable to mark the steps of that process by which the virtuous and elevated man sinks to ruin.

II. Its effects on the *intellectual powers*. Here the influence of intemperance is marked and decisive. The inebriate first loses his vivacity and natural acuteness of perception. His judgment becomes clouded and impaired in its strength, the memory also enfeebled and sometimes quite obliterated. The mind is wandering and vacant, and incapable of intense or steady application to any one subject. This state is usually accompanied by an unmeaning stare or fixedness of countenance quite peculiar to the drunkard. The imagination and the will, if not enfeebled, acquire a morbid sensibility, from which they are thrown into a state of violent excitement from the slightest causes: hence the inebriate sheds floods of tears over the pictures of his own fancy. I have often seen him, and especially on his recovery from a fit of intoxication, weep and laugh alternately over the same scene. The will, too, acquires an omnipotent ascendancy over him, and is the only monitor to which

he yields obedience. The appeals of conscience, the claims of domestic happiness, of wives and children, of patriotism and of virtue, are not heard.

The different powers of the mind having thus lost their natural relation to each other, the healthy balance being destroyed, the intellect is no longer fit for intense application, or successful effort—and although the inebriate may, and sometimes does, astonish, by the wildness of his fancy and the poignancy of his wit, yet in nine cases out of ten he fails, and there is never any confidence to be reposed in him. There have been a few who, from peculiarity of constitution, or some other cause, have continued to perform intellectual labor for many years, while slaves to ardent spirits; but in no instance has the vigor of the intellect or its ability to labor been increased by indulgence: and where there is one who has been able to struggle on under the habits of intemperance, there are thousands who have perished in the experiment, and some among the most powerful minds that the world ever produced. On the other hand, we shall find, by looking over the biography of the great men of every age, that those who have possessed the clearest and most powerful minds, neither drank spirits nor indulged in the pleasures of the table. Sir Isaac Newton, John Locke, Dr. Franklin, John Wesley, Sir William Jones, John Fletcher, and President Edwards, furnish a striking illustration of this truth. One of the secrets by which these men produced such astonishing results, were enabled to perform so much intellectual labor, and of so high a grade, and to arrive at old age in the enjoyment of health, was a rigid course of abstinence. But I hasten to consider more particularly,

III. Its effects on the *physical powers*. In view of this part of the subject, the attention of the critical observer is arrested by a series of circumstances, alike disgusting and melancholy.

1. The *odor of the breath* of the drunkard furnishes the earliest indication by which the habitual use of ardent spirit becomes known. This is occasioned by the exhalation of the alcoholic principle from the bronchial vessels and air-cells of the lungs—not of pure spirit, as taken into the stomach, but of spirit which has been absorbed, has mingled with the blood, and has been subjected to the ac-

tion of the different organs of the body; and not containing any principle which contributes to the nourishment or renovation of the system, is cast out with the other excretions, as poisonous and hurtful; and this peculiar odor does not arise from the accidental or occasional use of spirit; it marks only the habitual dram-drinker—the one who indulges daily in his potation; and although its density varies in some degree with the kind of spirit consumed, the habits and constitution of the individual, yet it bears generally a close relation to the degree of intemperance. These observations are confirmed by some experiments made on living animals by the celebrated French physiologist, Magendie. He ascertained that diluted alcohol, a solution of camphor, and some other odorous substances, when subjected to the absorbing power of the veins, are taken up by them, and after mingling with the blood, pass off by the pulmonary exhalants. Even phosphorus injected into the crural vein of a dog, he found to pass off in a few moments from the nostrils of the animal in a dense white vapor, which he ascertained to be phosphoric acid. Cases have occurred, in which the breath of the drunkard has become so highly charged with alcohol as to render it actually inflammable by the touch of a taper. One individual in particular is mentioned, who often amused his comrades by passing his breath through a small tube, and setting it on fire as it issued from it. It appears, also, that this has been the source of that combustion of the body of the drunkard which has been denominated spontaneous; many well authenticated cases of which are on record.

2. The perspirable matter which passes off from the skin becomes charged with the odor of alcohol in the drunkard, and is so far changed in some cases as to furnish evidence of the kind of spirit drank. I have met with two instances, says Dr. McNish, the one in a claret, and the other in a port drinker; in which the moisture that exhaled from their bodies had a ruddy complexion, similar to the wine on which they had committed their debauch.

3. The *whole system* soon bears marks of debility and decay. The voluntary muscles lose their power, and cease to act under the control of the will; and hence all the movements become awkward, exhibiting the appearance of stiffness in the joints. The positions of the body, also, are

tottering and infirm, and the step loses its elasticity and vigor. The muscles, and especially those of the face and lips, are often affected with a convulsive twitching, which produces the involuntary winking of the eye, and quivering of the lip, so characteristic of the intemperate. Indeed, all the motions seem unnatural and forced, as if restrained by some power within. The extremities are at length seized with a tremor, which is more strongly marked after recovery from a fit of intoxication. The lips lose their significant expression, and become sensual—the complexion assumes a sickly leaden hue, or is changed to an unhealthy, fiery redness, and is covered with red streaks and blotches. The eye becomes watery, tender, and inflamed, and loses its intelligence and its fire. These symptoms, together with a certain cedematous appearance about the eye, bloating of the whole body, with a dry, feverish skin, seldom fail to mark the habitual dram-drinker; and they go on increasing and increasing, till the intelligence and dignity of the man is lost in the tameness and sensuality of the brute.

But these effects, which are external and obvious, are only the “signals which nature holds out, and waves in token of internal distress;” for all the time the inebriate has been pouring down his daily draught and making merry over the cup, morbid changes have been going on within; and though these are unseen, and it may be, unsuspected, they are fatal, irretrievable. A few of the most important of these changes I shall now describe:

4. The *stomach* and its functions. This is the great organ of digestion. It is the chief instrument by which food is prepared to nourish, sustain and renovate the different tissues of the body, to carry on the various functions, and to supply the waste which continually takes place in the system. It is not strange, therefore, that the habitual application to the organ of any agent, calculated to derange its functions, or change its organization, should be followed by symptoms so various and extensive, and by consequences so fatal. The use of ardent spirit produces both these effects; it deranges the functions of the stomach, and if persisted in, seldom fails to change its organic structure.

The inebriate first loses his appetite, and becomes thirsty and feverish; he vomits in the morning, and is affected with spasmodic pains in the region of the stomach. He is often

seized with permanent dyspepsia, and either wastes away by degrees, or dies suddenly of a fit of cramp in the stomach.

On examining the stomach after death, it is generally found irritated, and approaching a state of inflammation, with its vessels enlarged, and filled with black blood; and particularly those of the mucous coat, which gives to the internal surface of the stomach the appearance of purple or reddish streaks, resembling the livid patches seen on the face of the drunkard.

The coats of the stomach become greatly thickened and corrugated, and so firmly united as to form one inseparable mass. In this state, the walls of the organ are sometimes increased in thickness to the extent of ten or twelve lines, and are sometimes found also in a scirrhus or cancerous condition.

The following case occurred in my practice several years since: A middle-aged gentleman, of wealth and standing, had long been accustomed to mingle in the convivial circle, and though by no means a drunkard, had indulged at times in the use of his old cogniac, with an unsparing hand. He was at length seized with pain in the region of the stomach, and a vomiting of his food an hour or two after eating. In about eighteen months he died in a state of extreme emaciation.

On opening the body after death, the walls of the whole of the right extremity of the stomach were found in a scirrhus and cancerous condition, and thickened to the extent of about two inches. The cavity of the organ was so far obliterated as scarcely to admit the passage of a probe from the left to the right extremity, and the opening which remained was so unequal and irregular as to render it evident that but little of the nourishment he had received could have passed the lower orifice of the stomach for many months.

I have never dissected the stomach of a drunkard, in which the organ did not manifest some remarkable deviation from its healthy condition. But the derangement of the stomach is not limited to the function of nutrition merely. This organ is closely united to every other organ, and to each individual tissue of the body, by its sympathetic relations. When the stomach, therefore, becomes diseased, other parts suffer with it. The functions of the brain, the heart, the lungs, and the liver become disordered; the secre-

tions are altered, and all the operations of the animal economy are more or less affected.

5. The *liver* and its functions. Alcohol, in every form and proportion, has long been known to exert a strong and speedy influence on this organ, when used internally. Aware of this fact, the poultry-dealers of England are in the habit of mixing a quantity of spirit with the food of their fowls, in order to increase the size of the liver; so that they may be enabled to supply to the epicure a greater abundance of that part of the animal, which he regards as the most delicious.

The influence of spirit on the liver is exerted in two ways: First, the impression made upon the mucous coat of the stomach is extended to the liver by sympathy: the second mode of action is through the medium of the circulation, and by the immediate action of the alcoholic principle on the liver itself, as it passes through the organ, mingling with the blood. In whichever of these ways it operates, its first effect is to increase the action of the liver, and sometimes to such a degree as to produce inflammation. Its secretion becomes changed from a bright yellow to a green or black, and from a thin fluid to a substance resembling tar in its consistence. There soon follows also an enlargement of the liver and a change in its organic structure. I have met with several cases in which the liver has become enlarged from intemperance, so as to occupy a greater part of the cavity of the abdomen, and weighing from eight to twelve pounds, when it should have weighed not more than four or five.

The liver sometimes, however, even when it manifests great morbid change in its organic structure, is rather diminished than increased in its volume. This was the case in the person of the celebrated stage-actor, George Frederick Cook, who died a few years since in the city of New-York. This extraordinary man was long distinguished for the profligacy of his life, as well as for the native vigor of his mind and body. At the time of his death the body was opened by Dr. Hosack, who found that the liver did not exceed its usual dimensions, but was astonishingly hard, of a lighter color than natural, and that its texture was so dense as to make considerable resistance to the knife. The blood-vessels, which in a healthy condition are extremely numerous and large, were in this case nearly obliterated, evincing that

the regular circulation through the liver, had long since ceased; and tubercles were found throughout the whole substance of the organ.

I have met with several cases in the course of my dissections, in which the liver was found smaller than natural, shrivelled, indurated, its blood-vessels diminished in size and number, with the whole of its internal structure more or less changed. In consequence of these morbid changes in the liver, other organs become affected, as the spleen, the pancreas, &c. either by sympathy or in consequence of their dependence on the healthy functions of the liver for the due performance of their own.

6. *Of the Brain* and its functions. Inflammation and engorgement of this organ are frequent consequences of intemperance, and may take place during a debauch—or may arise some time after, during the stage of debility, from a loss of the healthy balance of action between the different parts of the system. This inflammation is sometimes acute, is marked by furious delirium, and terminates fatally in the course of a few days, and sometimes a few hours. At other times it assumes a chronic form, continues much longer, and then frequently results in an effusion of serum, or an extravasation of blood, and the patient dies in a state of insensibility, with all the symptoms of compressed brain. Sometimes the system becomes so saturated with ardent spirit, that there is good reason to believe, the effusions which take place in the cavities of the brain, and elsewhere, are composed, in part at least, of the alcoholic principle. The following case occurred, not long since, in England, and is attested by unquestionable authority.

A man was taken up dead in the streets of London, soon after having drank a quart of gin, on a wager. He was carried to the Westminster Hospital, and there dissected. "In the ventricles of the brain was found a considerable quantity of limpid fluid, distinctly impregnated with gin, both to the sense of smell and taste, and even to the test of inflammability. The liquid appeared to the senses of the examining students, as strong as one-third gin, and two-thirds water."

Dr. Armstrong, who has enjoyed very ample opportunity of investigating this subject, speaks of the chronic inflamma-

tion of the brain and its membranes, as frequently proceeding from the free use of strong liquors.

It is a fact familiar to every anatomist, that alcohol, even when greatly diluted, has, by its action on the brain after death, the effect of hardening it, as well as most of the tissues of the body which contain albumen, and it is common to immerse the brain in ardent spirit for a few days, in order to render it the firmer for dissection.

On examining the brain after death of such as have long been accustomed to the free use of ardent spirit, it is said the organ is generally found harder than in temperate persons. It has no longer that delicate and elastic texture. Its arteries become diminished in size, and lose their transparency, while the veins and sinuses are greatly distended and irregularly enlarged.

This statement is confirmed by my own dissections, and they seem also to be in full accordance with all the intellectual and physical phenomena displayed in the drunkard, while living.

7. *The heart* and its functions. It has generally been supposed, that the heart is less frequently affected by intemperance, than most of the other great vital organs; but, from the history of the cases which have come under my own observation, I am convinced that it seldom escapes disease under the habitual use of ardent spirit. And why should it, since it is thrown almost perpetually into a state of unnatural exertion, the very effect produced by the violent agitation of the passions, the influence of which upon this organ is found so injurious?

The following case came under my notice, a few winters since. A large athletic man, long accustomed to the use of ardent spirit, on drinking a glass of raw whiskey, dropped instantly dead. On carefully dissecting the body, no adequate cause of the sudden cessation of life could be found in any part, except the heart. This organ was free from blood, was hard and firmly contracted, as if affected by spasm. I am convinced that many of those cases of sudden death which take place with intemperate persons, are the result of a spasmodic action of the heart, from sympathy with the stomach, or some other part of the system. The use of ardent spirit, no doubt, promotes also the ossification of the

valves of the heart, as well as the developement of other organic affections.

8. *The lungs* and their functions. Respiration in the inebriate is generally oppressed and laborious, and especially after eating or violent exercise; and he is teased with a cough, attended with copious expectoration, and especially after his recovery from a fit of intoxication; and these symptoms go on increasing, and unless arrested in their progress, terminate in consumption.

This affection of the lungs is produced in two ways; first, by the immediate action of the alcoholic principle upon the highly sensible membrane which lines the trachea, bronchial vessels, and air-cells of the lungs, as poured out by the exhalants; and second, by the sympathy which is called into action between the lungs and other organs already in a state of disease, and more especially that of the stomach and liver.

I have met with many cases, in the course of my practice, of cough and difficult breathing, which could be relieved only by regulating the functions of the stomach, and which soon yielded, on the patient ceasing to irritate this organ with ardent spirit. I have found the liver still more frequently the source of this affection; and on restoring the organ to its healthy condition, by laying aside the use of ardent spirit, all the pulmonary symptoms have subsided.

On examining the lungs of the drunkard after death, they are frequently found adhering to the walls of the chest; hepatized, or affected with tubercles.

But time would fail me, were I to attempt an account of half the pathology of drunkenness. *Dyspepsia, Jaundice, Emaciation, Corpulence, Dropsy, Ulcers, Rheumatism, Gout, Tremors, Palpitation, Hysteria, Epilepsy, Palsy, Lethargy, Apoplexy, Melancholy, Madness, Delirium-tremens, and Premature old age*, compose but a small part of the catalogue of diseases produced by ardent spirit. Indeed, there is scarcely a morbid affection to which the human body is liable, that has not, in one way or another, been produced by it; there is not a disease but it has aggravated, nor a predisposition to disease, which it has not called into action; and although its effects are in some degree modified by age and temperament, by habit and occupation, by climate and season of the year, and even by the intoxicating agent itself; yet, the general and ultimate consequences are the same.

But I pass on to notice one state of the system, produced by ardent spirit, too important and interesting to leave unexamined. It is that *predisposition to disease and death* which so strongly characterizes the drunkard in every situation of life.

It is unquestionably true, that many of the surrounding objects in nature are constantly tending to man's destruction. The excess of heat and cold, humidity and dryness, noxious exhalations from the earth, the floating atoms in the atmosphere, the poisonous vapors from decomposed animal and vegetable matter, with many other invisible agents, are exerting their deadly influence; and were it not that every part of his system is endowed with a self-preserving power, a principle of excitability, or in other words, a vital principle, the operations of the economy would cease, and a dissolution of his organic structure take place. But this principle being implanted in the system, re-action takes place, and thereby a vigorous contest is maintained with the warring elements without, as well as with the principle of decay within.

It is thus that man is enabled to endure, from year to year, the toils and fatigues of life, the variations of heat and cold, and the vicissitudes of the seasons--that he is enabled to traverse every region of the globe, and to live with almost equal ease under the equator and in the frozen regions of the north. It is by this power that all his functions are performed, from the commencement to the close of life.

The principle of excitability exists in the highest degree in the infant, and diminishes at every succeeding period of life; and if man is not cut down by disease or violence, he struggles on, and finally dies a natural death; a death occasioned by the exhaustion of the principle of excitability. In order to prevent the too rapid exhaustion of this principle, nature has especially provided for its restoration by establishing a period of sleep. After being awake for sixteen or eighteen hours, a sensation of fatigue ensues, and all the functions are performed with diminished precision and energy. Locomotion becomes feeble and tottering, the voice harsh, the intellect obtuse and powerless, and all the senses blunted. In this state the individual anxiously retires from the light and from the noise and bustle of business, seeks that position which requires the least effort to

sustain it, and abandons himself to rest. The will ceases to act, and he loses in succession all the senses; the muscles unbend themselves and permit the limbs to fall into the most easy and natural position; digestion, respiration, circulation, secretion, and the other functions, go on with diminished power and activity; and consequently the wasted excitability is gradually restored. After a repose of six or eight hours, this principle becomes accumulated to its full measure and the individual awakes and finds his system invigorated and refreshed. His muscular power is augmented, his senses are acute and discriminating, his intellect active and eager for labor, and all his functions move on with renewed energy. But if the stomach be oppressed by food, or the system excited by stimulating drinks, the sleep, though it may be profound, is never tranquil and refreshing.

The system being raised to a state of feverish excitement, and its healthy balance disturbed, its exhausted excitability is not restored. The individual awakes, but finds himself fatigued rather than invigorated. His muscles are relaxed, his senses obtuse, his intellect impaired, and his whole system disordered; and it is not till he is again under the influence of food and stimulus that he is fit for the occupations of life. And thus he loses the benefits of this wise provision of repose designed for his own preservation.

Nothing, probably, tends more powerfully to produce premature old age than disturbed and unrefreshing sleep.

It is also true that artificial stimulus, in whatever way applied, tends constantly to exhaust the principle of excitability of the system, and this in proportion to its intensity, and the freedom with which it is applied.

But there is still another principle on which the use of ardent spirit predisposes the drunkard to disease and death. It acts on the blood, impairs its vitality, deprives it of its red color, and thereby renders it unfit to stimulate the heart, and other organs through which it circulates; unfit, also, to supply the materials for the different secretions, and to renovate the different tissues of the body, as well as to sustain the energy of the brain; offices which it can perform only while it retains the vermilion color, and other arterial properties. The blood of the drunkard is several shades darker in its color, than that of temperate persons,

and also coagulates less readily and firmly, and is loaded with serum; appearances which indicate that it has exchanged its arterial properties for those of the venous blood. This is the cause of the livid complexion of the inebriate, which so strongly marks him in the advanced stage of intemperance. Hence, too, all the functions of his body are sluggish, irregular, and the whole system loses its tone and its energy. If ardent spirit, when taken into the system, exhausts the vital principle of the solids, it destroys the vital principle of the blood also; and if taken in large quantities, produces sudden death; in which case the blood, as in death produced by lightning, by opium, or by violent and long continued exertion, does not coagulate.

The principles laid down are plain, and of easy application to the case before us.

The inebriate having, by the habitual use of ardent spirit, exhausted to a greater or lesser extent the principle of excitability in the solids, the power of reaction; and the blood having become incapable of performing its offices also, he is alike predisposed to every disease, and rendered liable to the inroads of every invading foe. So far, therefore, from protecting the system against disease, intemperance ever constitutes one of its strongest predisposing causes.

Superadded to this, whenever disease does lay its grasp upon the drunkard, the powers of life being already enfeebled by the stimulus of ardent spirit, he unexpectedly sinks in the contest, and but too frequently to the mortification of his physician, and the surprise and grief of his friends. Indeed, inebriation so enfeebles the powers of life, so modifies the character of disease, and so changes the operation of medical agents, that unless the young physician has studied thoroughly the constitution of the drunkard, he has but partially learned his profession, and is not fit for a practitioner of the present age.

These are the true reasons why the drunkard dies so easily, and from such slight causes.

A sudden cold, a pleurisy, a fever, a fractured limb, or a slight wound of the skin, is often more than his shattered powers can endure. Even a little excess of exertion, an exposure to heat or cold, a hearty repast or a glass of cold

water, not unfrequently extinguishes the small remains of the vital principle.

In the season that has just closed upon us, we have had a melancholy exhibition of the effects of intemperance in the tragical death of some dozens of our fellow-citizens; and had the extreme heat which prevailed for several days continued for as many weeks, we should hardly have had a confirmed drunkard left among us.

Many of those deaths which came under my notice seemed almost spontaneous, and some of them took place in less than one hour from the first symptoms of indisposition. Some died apparently from a slight excess of fatigue, some from a few hours' exposure to the sun, and some from a small draught of cold water; causes quite inadequate to the production of such effects in temperate persons.

Thus, fellow-citizens, I have endeavored to delineate the effects of ardent spirit upon man, and more especially to portray its influence on his moral, intellectual, and physical powers. And now let me mention a few things which must be done in order that the evil may be eradicated.

1. Let us keep in view the objects of this Society, and the obligation imposed on us, *to use all proper measures to discourage the use of ardent spirit in the social circle, at public meetings, on the farm, in the mechanic shop, and in all other places.* It is not a mere matter of formality that we have put our names to this Society's constitution; we have pledged ourselves to be bold, active, and persevering in the cause; to proclaim the dangers of intemperance to our fellow-citizens, and to do what we can to arrest its progress.

In view of these objects and of this pledge, then, let us, if indeed we have not already done it, banish ardent spirit from our houses at once, and for ever, and then we can act with decision and energy, and speak in a tone of authority, and our voice will be heard, if precept be sanctioned by example.

2. Let us use our utmost endeavors to lessen the number, and, if possible, utterly exterminate from among us those establishments which are the chief agents in propagating the evils of intemperance. I refer to those shops which are licensed for retailing ardent spirit. Here is the source of

the evil. These are the agents that are sowing among us the seeds of vice, and poverty and wretchedness.

How preposterous! that an enlightened community, professing the highest regard for morality and religion, making laws for the suppression and punishment of vice, and the promotion of virtue and good order, instituting societies to encourage industry, enlighten the ignorant, reclaim the vicious, bring back the wanderer, protect the orphan, feed the hungry, clothe the naked, bind up the broken-hearted, and restore domestic peace, should, at the same time, create and foster those very means that carry idleness, and ignorance, and vice, and nakedness, and starvation, and discord into all ranks of society; that make widows and orphans, that sow the seeds of disease and death among us; that strike, indeed, at the foundation of all that is good and great.

You create paupers, and lodge them in your almshouse—orphans, and give them a residence in your asylum—convicts, and send them to the penitentiary. You seduce men to crime, and then arraign them at the bar of justice—immure them in prison. With one hand you thrust the dagger to the heart—with the other attempt to assuage the pain it causes.

We all remember to have heard, from the lips of our parents, the narration of the fact, that in the early history of our country the tomahawk and scalping-knife were put into the hands of our savage neighbors, by our enemies at war, and that a bounty was awarded for the depredations they committed on the lives of our defenceless fellow-citizens. Our feelings were shocked at the recital, and a prejudice was created, as well to these poor wandering savages, as to the nation that prompted them to the work, which neither time nor education has eradicated. Yet, as merciless and savage as this practice may appear to us, it was Christian, it was humane, compared with ours: theirs sought only the life-blood, and that of their enemies; ours seeks the blood of souls, and that of our own citizens, and friends, and neighbors. Their avarice was satiated with a few inches of the scalp, and the death inflicted was often a sudden and easy one; ours produces a death that lingers; and not content with the lives of our fellow-citizens, it rifles their pockets. It revels in rapine and robbery; it sacks whole towns and villages; it lays waste fields and vineyards; it

riots on domestic peace, and virtue, and happiness; it sets at variance the husband and the wife; it causes the parent to forsake the child, and the child to curse the parent; it tears asunder the strongest bonds of society; it severs the tenderest ties of nature.

And who is the author of all this?—and where lies the responsibility? I appeal to my fellow-citizens!

Are not we the authors?—does not the responsibility rest upon us?—is it not so?

The power emanates from us; we delegate it to the constituted authorities, and we say to them go on, “cast fire-brands, arrows, and death;” and let the blood of those that perish “be on us and on our children.” We put the tomahawk and scalping-knife into the hands of our neighbors, and award to them a bounty. We do more—we share the plunder. Let us arouse, my fellow-citizens, from our insensibility, and redeem our character for consistency, humanity, and benevolence.

3. Let us not confine our views or limit our operations to the narrow boundaries of our own city or district. Intemperance is a common enemy. It exists every where, and every where is pursuing its victims to destruction; while, therefore, we are actively engaged upon the subject in our own city, let us endeavor to do something elsewhere; and much may be done by spreading through our country correct information on the subject of intemperance. To this end, every newspaper and every press should be put in requisition. Circulate through the various avenues suitable Tracts, essays, and other documents, setting forth the causes of intemperance, its evils, and its remedy, together with an account of the cheering progress now making to eradicate it.

Do this, and you will find thousands starting up in different parts of the country, to lend their influence, and give their money in support of your cause; individuals who have hitherto been unconscious of the extent and magnitude of the evil of intemperance; you will find some who have been slumbering upon the very precipice of ruin, rallying round your standard. Indeed we have all been insensible, till the voice of alarm was sounded, and the facts were set in array before us.

4. Appeal to the medical profession of the country, and ask them to correct the false idea which so extensively, I

may say almost universally prevails, viz. : that ardent spirit is sometimes necessary in the treatment of disease. This opinion has slain its thousands and its tens of thousands, and multitudes of dram-drinkers daily shelter themselves under its delusive mask. One takes a little to raise his desponding spirits, or to drown his sorrow ; another to sharpen his appetite or relieve his dyspepsia ; one to ease his gouty pains, another to supple his stiffened limbs or calm his quivering muscles. One drinks to overcome the heat, another to ward off the cold ; and all this as a medicine. Appeal, then, to the medical profession, and they will tell you, every independent, honest, sober, intelligent member of it will tell you, that there is no case in which ardent spirit is indispensable, and for which there is not an adequate substitute. And it is time the profession should have an opportunity to exonerate itself from the charge under which it has long rested, of *making drunkards*. But I entreat my professional brethren not to be content with giving a mere assent to this truth. You hold a station in society which gives you a commanding influence on this subject ; and if you will but raise your voice and speak out boldly, you may exert an agency in this matter which will bring down the blessings of unborn millions upon your memory.

5. Much may be done by guarding the *rising generation* from the contagion of intemperance. It is especially with the children and youth of our land, that we may expect our efforts to be permanently useful. Let us, then, guard with peculiar vigilance the youthful mind, and with all suitable measures, impress it with such sentiments of disgust and horror of the vice of intemperance, as to cause it to shrink from its very approach. Carry the subject into our Infant and Sunday Schools, and call on the managers and teachers of those institutions, to aid you by the circulation of suitable Tracts, and by such other instructions as may be deemed proper. Let the rising generation be protected but for a few years, and the present race of drunkards will have disappeared from among us, and there will be no new recruits to take their place.

6. Let intelligent and efficient agents be sent out into every portion of our country, to spread abroad information upon the subject of intemperance, to rouse up the people to a sense of their danger, and to form temperance societies ;

and let there be such a system of correspondence and co-operation established among these associations as will convey information to each, and impart energy and efficiency to the whole. "No great melioration of the human condition was ever achieved without the concurrent effort of numbers; and no extended and well directed association of moral influence was ever made in vain."

7. Let all who regard the virtue, the honor, and the patriotism of their country, withhold their suffrages from those candidates for office who offer ardent spirit as a bribe to secure their elevation to power. It is derogatory to the liberties of our country, that office can be obtained by such corruption—be held by such a tenure.

8. Let the Ministers of the Gospel, wherever called to labor, exert their influence, by precept and example, in promoting the cause of temperance;—many of them have already stepped forth, and with a noble boldness have proclaimed the alarm, and have led on in the work of reformation; but many timid spirits still linger, and others seem not deeply impressed with the importance of the subject, and with the responsibility of their station. Ye venerated men, you are not only called to stand forth as our moral beacons, and be unto us burning and shining lights; but you are placed as watchmen upon our walls, to announce to us the approach of danger. It is mainly through your example and your labors that religion and virtue are so extensively disseminated through our country—that this land is not now a moral waste. You have ever exerted an important influence in society, and have held a high place in the confidence and affections of the people. You are widely spread over the country, and the scene of your personal labors will furnish you with frequent opportunities to diffuse information upon the subject of temperance, and to advance its progress. Let me then ask you, one and all, to grant us your active and hearty co-operation.

9. Appeal to the *female sex* of our country, and ask them to come to your assistance; and if they will consent to steel their hearts against the inebriate, to shut out from their society the man who visits the tippling shop, their influence will be omnipotent. And by what power, ye mothers, and wives, and daughters, shall I invoke your aid? Shall I carry you to the house of the drunkard, and point you to

his weeping and broken-hearted wife, his suffering and degraded children, robed in rags, and poverty, and vice? Shall I go with you to the almshouse, the orphan asylum, and to the retreat for the insane, that your sensibility may be roused? Shall I ask you to accompany me to the penitentiary and the prison, that you may there behold the end of intemperance? Nay, shall I draw back the curtain and disclose to you the scene of the drunkard's death-bed? No—I will not demand of you a task so painful: rather let me remind you that you are to become the mothers of our future heroes and statesmen, philosophers and divines, lawyers and physicians: and shall they be enfeebled in body, debauched in morals, disordered in intellect, or healthy, pure, and full of mental energy? It is for you to decide this question. You have the future destiny of our beloved country in your hands. Let me entreat you, then, for your children's sake, and for your country's sake, not to ally yourselves to the drunkard, nor to put the cup to the mouth of your offspring, and thereby implant in them a craving for ardent spirit, which, once produced, is seldom eradicated.

10. Call upon all public and private associations, religious, literary, and scientific, to banish ardent spirit from their circle; call upon the agricultural, manufacturing, and commercial establishments, to withhold it from those engaged in their employment; call upon the legislatures of the different states to co-operate by the enactment of such laws as will discourage the vending of ardent spirit, and render licenses to sell it unattainable: call upon the proper officers to banish from the army and navy that article which, of all others, is most calculated to enfeeble the physical energies, corrupt the morals, destroy the patriotism, and damp the courage of our soldiers and sailors; call upon our national legislature to impose such duties on the distillation and importation of ardent spirit as will ultimately exclude it from the list of articles of commerce, and eradicate it from our land.

Finally, call upon every sober man, woman, and child, to raise their voices, their hearts, and their hands in this sacred cause, and never hold their peace, never cease their prayers, never stay their exertions, till intemperance shall be banished from our land and from the world.

any external source. It was purely a case of spontaneous ignition. A general sloughing soon came on, and his flesh was consumed, or removed in the dressing, leaving the bones and a few of the larger blood vessels standing. The blood, nevertheless, rallied around the heart and maintained the vital spark until the thirteenth day, when he died, not only the most loathsome, ill-featured, and dreadful picture that was ever presented to human view; but his shrieks, his cries, and lamentations, were enough to rend the heart of adamant. He complained of no pain of body—his flesh was gone. He said he was suffering the torments of hell; that he was just upon its threshold, and should soon enter its dismal caverns; and in this frame of mind gave up the ghost. O, the death of a drunkard! Well may it be said to beggar all description. I have seen other drunkards die, but never in a manner so awful and affecting. They usually go off senseless and stupid, as it regards a future state!"

Kingston Gazette.

THE BURNING OF THE HUMAN BODY BY HABITUAL DRUNKENNESS.

Many curious examples of this are given in the history of intoxicating liquors contained in the third volume of Dr. Lardner's Cabinet Cyclopædia. In these cases, the body became so saturated with spirits, that it took fire either spontaneously or by the proximity of flame, which otherwise could have produced no injury. We extract the following:

Mary Clues, aged fifty, was much addicted to intoxication. Her propensity to this was such, that for about year scarcely a day passed in which she did not drink at least half a pint of rum, or anniseed-water. Her health gradually declined; she was attacked with jaundice, and was confined to her bed. She still continued her habit of drinking. One morning she fell on the floor, her weakness having prevented her getting up, and she lay so till some one entered and put her to bed.

lowing night she wished to be left alone. A woman, on quitting her, had put coal on the fire, and placed a light on a chair at the head of the bed. At five in the morning a smoke was seen issuing through the window, and the door being broken open, some flames which were in the room were soon extinguished. Between the bed and the chimney were found the remains of the unfortunate Clues. One leg and a thigh were still entire; but there remained nothing of the skin, the muscles, or the viscera. The bones of the cranium, the breast, the spine, and the upper extremities were entirely calcined. The furniture had sustained little injury. The side of the bed next the chimney had suffered most; the wood of it was slightly burnt, but the feathers, clothes, and covering were safe. Nothing except the body exhibited any strong traces of fire.

Grace Pitt, aged about 60, had a habit of coming down from her bed-room, half dressed, to smoke a pipe. One night she came down as usual. Her daughter, who slept with her, did not perceive she was absent till next morning, when she went down to the kitchen and found her mother stretched out on the right side, with her head near the grate, having the appearance of a log of wood consumed by fire, without an apparent flame. The foetid odor and smoke which exhaled from the body almost suffocated some of the neighbors, who hastened to the girl's assistance. The trunk was in some measure incinerated, and resembled a heap of coals covered with white ashes. The head, the arms, the legs, and the thighs had also participated in the burning. This woman had drunk a large quantity of spirituous liquor. There was no fire in the grate, and the candle had burned entirely out in the candlestick, which was close to her. Besides, there were found near the consumed body the clothes of a child and a paper screen, which sustained no injury. The dress of this woman consisted of a cotton gown.

Christian Journal.

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raise the

cause, and for Tracts will receive prompt attention, if ad-
 never stay "The American Tract Society, No. 144 Nassau-
 nished from the City-Hall, New-York."